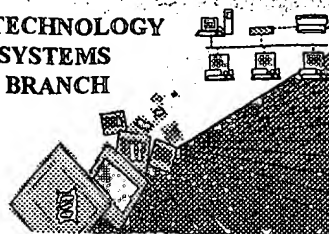BIOTECHNOLOGY
SYSTEMS
BRANCH

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information
Center (STIC) detected errors when processing the following computer readable
form:

Application Serial Number: _09/424,091C_
Source: _1600_
Date Processed by STIC: _1/29/2003_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE
   APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A
   NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
        http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is
a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the
United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission
   User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
   Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
           Or,
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Tw ,
   2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
   Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: _09/424,091C_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 ____ Wrapped Nucleics
Wrapped Aminos

The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2 ____ Invalid Line Length

The rules require that a line not exceed 72 characters in length. This includes white spaces.

3 ____ Misaligned Amino
Numbering

The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4 ____ Non-ASCII

The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5 ____ Variable Length

Sequence(s) ____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6 ____ PatentIn 2.0
"bug"

A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7 ____ Skipped Sequences
(OLD RULES)

Sequence(s) ____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
    (i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8 ____ Skipped Sequences
(NEW RULES)

Sequence(s) ____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9 ____ Use of n's or Xaa's
(NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.

10 ____ Invalid <213>
Response

Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11 ____ Use of <220>

Sequence(s) _1-2_ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12 ____ PatentIn 2.0
"bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13 ____ Misuse of n

n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH – Biotechnology Systems Branch – 08/21/2001

1600

```
RAW SEQUENCE LISTING                    DATE: 01/29/2003
PATENT APPLICATION:  US/09/424,091C     TIME: 13:06:39

Input Set : A:\#332459 v1 - 350013-66 Corrected Sequence Listing.txt
Output Set: N:\CRF4\01292003\I424091C.raw
```

```
         2 <110> APPLICANT: Richard Andrew Kay
W-->     3 <120> TITLE OF INVENTION: Immunological method
W-->     4 <130> FILE REFERENCE: DUNW/P19095US
W-->     5 <140> CURRENT APPLICATION NUMBER: 09/424091C
C-->     6 <141> CURRENT FILING DATE: 2000-02-23
         7 <150> PRIOR APPLICATION NUMBER: GB 9710820.3
W-->     8 <151> PRIOR FILING DATE: 27 May 1997          1997-05-27
W-->     9 <160> NUMBER OF SEQ ID: 47
        10 <170> SOFTWARE: SeqWin99
W-->    11 <210> SEQ ID NO: 1                                    p.1
        12 <211> LENGTH: 20                          Does No. Comply
        13 <212> TYPE: DNA                           Corrected Diskette Needed
        14 <213> ORGANISM: Artificial Sequence
W-->    15 <220> FEATURE:
        16 <223> OTHER INFORMATION:      see item 11 on Error Summary Sheet
W-->    17 <400> SEQUENCE: 1
        18 catcagaagc agagatctcc                                       20
        19 <210> SEQ ID NO: 2
        20 <211> LENGTH: 20
        21 <212> TYPE: DNA
        22 <213> ORGANISM: Artificial Sequence
W-->    23 <220> FEATURE:
        24 <223> OTHER INFORMATION:            see item 11
W-->    25 <400> SEQUENCE: 2
        26 gatgtcaagc tggtcgagaa                                       20
        27 <210> SEQ ID NO: 3
        28 <211> LENGTH: 18
        29 <212> TYPE: DNA
        30 <213> ORGANISM: Artificial Sequence
W-->    31 <220> FEATURE:
        32 <223> OTHER INFORMATION: 5' PCR Primer
W-->    33 <400> SEQUENCE: 3
        34 ctgaggtgca actactca                                         18
        35 <210> SEQ ID NO: 4
        36 <211> LENGTH: 24
        37 <212> TYPE: DNA
        38 <213> ORGANISM: Artificial Sequence
W-->    39 <220> FEATURE:
        40 <223> OTHER INFORMATION: 5' PCR Primer
W-->    41 <400> SEQUENCE: 4
        42 gtgttcccag agggagccat tgcc                                   24
        43 <210> SEQ ID NO: 5
        44 <211> LENGTH: 21
```

```
       45 <212> TYPE: DNA
       46 <213> ORGANISM: Artificial Sequence
W-->   47 <220> FEATURE:
       48 <223> OTHER INFORMATION: 5' PCR Primer
W-->   49 <400> SEQUENCE: 5
       50 ggtgaacagt caacagggag a                              21
       51 <210> SEQ ID NO: 6
       52 <211> LENGTH: 21
       53 <212> TYPE: DNA
       54 <213> ORGANISM: Artificial Sequence
W-->   55 <220> FEATURE:
       56 <223> OTHER INFORMATION: 5' PCR Primer
W-->   57 <400> SEQUENCE: 6
       58 acaagcatta ctgtactcct a                              21
       59 <210> SEQ ID NO: 7
       60 <211> LENGTH: 18
       61 <212> TYPE: DNA
       62 <213> ORGANISM: Artificial Sequence
W-->   63 <220> FEATURE:
       64 <223> OTHER INFORMATION: 5' PCR Primer
W-->   65 <400> SEQUENCE: 7
       66 ggccctgaac attcagga                                  18
       67 <210> SEQ ID NO: 8
       68 <211> LENGTH: 20
       69 <212> TYPE: DNA
       70 <213> ORGANISM: Artificial Sequence
W-->   71 <220> FEATURE:
       72 <223> OTHER INFORMATION: 5' PCR Primer
W-->   73 <400> SEQUENCE: 8
       74 gtcactttct agcctgctga                                20
       75 <210> SEQ ID NO: 9
       76 <211> LENGTH: 21
       77 <212> TYPE: DNA
       78 <213> ORGANISM: Artificial Sequence
W-->   79 <220> FEATURE:
       80 <223> OTHER INFORMATION: 5' PCR Primer
W-->   81 <400> SEQUENCE: 9
       82 aggagccatt gtccagataa a                            . 21
       83 <210> SEQ ID NO: 10
       84 <211> LENGTH: 22
       85 <212> TYPE: DNA
       86 <213> ORGANISM: Artificial Sequence
W-->   87 <220> FEATURE:
       88 <223> OTHER INFORMATION: 5' PCR Primer
W-->   89 <400> SEQUENCE: 10
       90 ggagagaatg tggagcagca tc                             22
       91 <210> SEQ ID NO: 11
       92 <211> LENGTH: 21
       93 <212> TYPE: DNA
```

```
        94 <213> ORGANISM: Artificial Sequence
W--> 95 <220> FEATURE:
        96 <223> OTHER INFORMATION: 5' PCR Primer
W--> 97 <400> SEQUENCE: 11
        98 atctcagtgc ttgtgataat a                                21
        99 <210> SEQ ID NO: 12
       100 <211> LENGTH: 24
       101 <212> TYPE: DNA
       102 <213> ORGANISM: Artificial Sequence
W--> 103 <220> FEATURE:
       104 <223> OTHER INFORMATION: 5' PCR Primer
W--> 105 <400> SEQUENCE: 12
       106 acccagctgg tggagcagag ccct                             24
       107 <210> SEQ ID NO: 13
       108 <211> LENGTH: 21
       109 <212> TYPE: DNA
       110 <213> ORGANISM: Artificial Sequence
W--> 111 <220> FEATURE:
       112 <223> OTHER INFORMATION: 5' PCR Primer
W--> 113 <400> SEQUENCE: 13
       114 agaaagcaag gaccaagtgt t                                21
       115 <210> SEQ ID NO: 14
       116 <211> LENGTH: 24
       117 <212> TYPE: DNA
       118 <213> ORGANISM: Artificial Sequence
W--> 119 <220> FEATURE:
       120 <223> OTHER INFORMATION: 5' PCR Primer
W--> 121 <400> SEQUENCE: 14
       122 cagaaggtaa ctcaagcgca gact                             24
       123 <210> SEQ ID NO: 15
       124 <211> LENGTH: 19
       125 <212> TYPE: DNA
       126 <213> ORGANISM: Artificial Sequence
W--> 127 <220> FEATURE:
       128 <223> OTHER INFORMATION: 5' PCR Primer
W--> 129 <400> SEQUENCE: 15
       130 gcttatgaga acactgcgt                                   19
       131 <210> SEQ ID NO: 16
       132 <211> LENGTH: 20
       133 <212> TYPE: DNA
       134 <213> ORGANISM: Artificial Sequence
W--> 135 <220> FEATURE:
       136 <223> OTHER INFORMATION: 5' PCR Primer
W--> 137 <400> SEQUENCE: 16
       138 gcagcttccc ttccagcaat                                  20
       139 <210> SEQ ID NO: 17
       140 <211> LENGTH: 20
       141 <212> TYPE: DNA
       142 <213> ORGANISM: Artificial Sequence
```

```
W--> 143 <220> FEATURE:
     144 <223> OTHER INFORMATION: 5' PCR Primer
W--> 145 <400> SEQUENCE: 17
     146 agaacctgac tgcccaggaa                                      20
     147 <210> SEQ ID NO: 18
     148 <211> LENGTH: 21
     149 <212> TYPE: DNA
     150 <213> ORGANISM: Artificial Sequence
W--> 151 <220> FEATURE:
     152 <223> OTHER INFORMATION: 5' PCR Primer
W--> 153 <400> SEQUENCE: 18
     154 catctccatg gactcatatg a                                   21
     155 <210> SEQ ID NO: 19
     156 <211> LENGTH: 19
     157 <212> TYPE: DNA
     158 <213> ORGANISM: Artificial Sequence
W--> 159 <220> FEATURE:
     160 <223> OTHER INFORMATION: 5' PCR Primer
W--> 161 <400> SEQUENCE: 19
     162 gactatacta acagcatgt                                      19
     163 <210> SEQ ID NO: 20
     164 <211> LENGTH: 18
     165 <212> TYPE: DNA
     166 <213> ORGANISM: Artificial Sequence
W--> 167 <220> FEATURE:
     168 <223> OTHER INFORMATION: 5' PCR Primer
W--> 169 <400> SEQUENCE: 20
     170 tgtcaggcaa tgacaagg                                       18
     171 <210> SEQ ID NO: 21
     172 <211> LENGTH: 26
     173 <212> TYPE: DNA
     174 <213> ORGANISM: Artificial Sequence
W--> 175 <220> FEATURE:
     176 <223> OTHER INFORMATION: Antisense 3' PCR primer
W--> 177 <400> SEQUENCE: 21
     178 aataggtcga gacacttgtc actgga                              26
     179 <210> SEQ ID NO: 22
     180 <211> LENGTH: 29
     181 <212> TYPE: DNA
     182 <213> ORGANISM: Artificial Sequence
W--> 183 <220> FEATURE:
     184 <223> OTHER INFORMATION: Antisense mid PCR primer
W--> 185 <400> SEQUENCE: 22
     186 cttgtcactg gatttagatc tctcagctg.                          29
     187 <210> SEQ ID NO: 23
     188 <211> LENGTH: 30
     189 <212> TYPE: DNA
     190 <213> ORGANISM: Artificial Sequence
W--> 191 <220> FEATURE:
```

```
        192 <223> OTHER INFORMATION: Antisense 5' PCR primer
W--> 193 <400> SEQUENCE: 23
        194 gtacacggca gggtcagggt tctggatatt                    30
        195 <210> SEQ ID NO: 24
        196 <211> LENGTH: 30
        197 <212> TYPE: DNA
        198 <213> ORGANISM: Artificial Sequence
W--> 199 <220> FEATURE:
        200 <223> OTHER INFORMATION: 5' PCR Primer
W--> 201 <400> SEQUENCE: 24
        202 aagagagagc aaaaggaaac attcttgaac                    30
        203 <210> SEQ ID NO: 25
        204 <211> LENGTH: 30
        205 <212> TYPE: DNA
        206 <213> ORGANISM: Artificial Sequence
W--> 207 <220> FEATURE:
        208 <223> OTHER INFORMATION: 5' PCR Primer
W--> 209 <400> SEQUENCE: 25
        210 gctgcaaggc cacatacgag caaggcgtcg                    30
        211 <210> SEQ ID NO: 26
        212 <211> LENGTH: 30
        213 <212> TYPE: DNA
        214 <213> ORGANISM: Artificial Sequence
W--> 215 <220> FEATURE:
        216 <223> OTHER INFORMATION: 5' PCR Primer
W--> 217 <400> SEQUENCE: 26
        218 aaaatgaaag aaaaaggaga tattcctgag                    30
        219 <210> SEQ ID NO: 27
        220 <211> LENGTH: 30
        221 <212> TYPE: DNA
        222 <213> ORGANISM: Artificial Sequence
W--> 223 <220> FEATURE:
        224 <223> OTHER INFORMATION: 5' PCR Primer
W--> 225 <400> SEQUENCE: 27
        226 ctgaggccac atatgagagt ggatttgtca                    30
        227 <210> SEQ ID NO: 28
        228 <211> LENGTH: 30
        229 <212> TYPE: DNA
        230 <213> ORGANISM: Artificial Sequence
W--> 231 <220> FEATURE:
        232 <223> OTHER INFORMATION: 5' PCR Primer
W--> 233 <400> SEQUENCE: 28
        234 cagagaaaca aaggaaactt ccctggtcga                    30
        235 <210> SEQ ID NO: 29
        236 <211> LENGTH: 30
        237 <212> TYPE: DNA
        238 <213> ORGANISM: Artificial Sequence
W--> 239 <220> FEATURE:
        240 <223> OTHER INFORMATION: 5' PCR Primer
```

VERIFICATION SUMMARY   DATE: 01/29/2003
PATENT APPLICATION: **US/09/424,091C**   TIME: 13:06:40

Input Set : **A:\#332459 v1 - 350013-66 Corrected Sequence Listing.txt**
Output Set: **N:\CRF4\01292003\I424091C.raw**

```
L:3 M:283 W: Missing Blank Line separator, <120> field identifier
L:4 M:283 W: Missing Blank Line separator, <130> field identifier
L:5 M:283 W: Missing Blank Line separator, <140> field identifier
L:6 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:8 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:9 M:283 W: Missing Blank Line separator, <160> field identifier
L:11 M:283 W: Missing Blank Line separator, <210> field identifier
L:15 M:283 W: Missing Blank Line separator, <220> field identifier
L:17 M:283 W: Missing Blank Line separator, <400> field identifier
L:17 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:16
L:23 M:283 W: Missing Blank Line separator, <220> field identifier
L:25 M:283 W: Missing Blank Line separator, <400> field identifier
L:25 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:2,Line#:24
L:31 M:283 W: Missing Blank Line separator, <220> field identifier
L:33 M:283 W: Missing Blank Line separator, <400> field identifier
L:39 M:283 W: Missing Blank Line separator, <220> field identifier
L:41 M:283 W: Missing Blank Line separator, <400> field identifier
L:47 M:283 W: Missing Blank Line separator, <220> field identifier
L:49 M:283 W: Missing Blank Line separator, <400> field identifier
L:55 M:283 W: Missing Blank Line separator, <220> field identifier
L:57 M:283 W: Missing Blank Line separator, <400> field identifier
L:63 M:283 W: Missing Blank Line separator, <220> field identifier
L:65 M:283 W: Missing Blank Line separator, <400> field identifier
L:71 M:283 W: Missing Blank Line separator, <220> field identifier
L:73 M:283 W: Missing Blank Line separator, <400> field identifier
L:79 M:283 W: Missing Blank Line separator, <220> field identifier
L:81 M:283 W: Missing Blank Line separator, <400> field identifier
L:87 M:283 W: Missing Blank Line separator, <220> field identifier
L:89 M:283 W: Missing Blank Line separator, <400> field identifier
L:95 M:283 W: Missing Blank Line separator, <220> field identifier
L:97 M:283 W: Missing Blank Line separator, <400> field identifier
L:103 M:283 W: Missing Blank Line separator, <220> field identifier
L:105 M:283 W: Missing Blank Line separator, <400> field identifier
L:111 M:283 W: Missing Blank Line separator, <220> field identifier
L:113 M:283 W: Missing Blank Line separator, <400> field identifier
L:119 M:283 W: Missing Blank Line separator, <220> field identifier
L:121 M:283 W: Missing Blank Line separator, <400> field identifier
L:127 M:283 W: Missing Blank Line separator, <220> field identifier
L:129 M:283 W: Missing Blank Line separator, <400> field identifier
L:135 M:283 W: Missing Blank Line separator, <220> field identifier
L:137 M:283 W: Missing Blank Line separator, <400> field identifier
L:143 M:283 W: Missing Blank Line separator, <220> field identifier
L:145 M:283 W: Missing Blank Line separator, <400> field identifier
L:151 M:283 W: Missing Blank Line separator, <220> field identifier
L:153 M:283 W: Missing Blank Line separator, <400> field identifier
L:159 M:283 W: Missing Blank Line separator, <220> field identifier
L:161 M:283 W: Missing Blank Line separator, <400> field identifier
L:167 M:283 W: Missing Blank Line separator, <220> field identifier
```

VERIFICATION SUMMARY DATE: 01/29/2003
PATENT APPLICATION: **US/09/424,091C** TIME: 13:06:40

Input Set : **A:\#332459 v1 - 350013-66 Corrected Sequence Listing.txt**
Output Set: **N:\CRF4\01292003\I424091C.raw**

```
L:169 M:283 W: Missing Blank Line separator, <400> field identifier
L:175 M:283 W: Missing Blank Line separator, <220> field identifier
L:177 M:283 W: Missing Blank Line separator, <400> field identifier
L:183 M:283 W: Missing Blank Line separator, <220> field identifier
L:185 M:283 W: Missing Blank Line separator, <400> field identifier
L:191 M:283 W: Missing Blank Line separator, <220> field identifier
```